

REMARKS

Reconsideration of this application, as amended, is respectfully requested. By this Amendment, independent claims 1 and 9 are being amended and dependant claim 17 and 18 are being added to more particularly point out and distinctly claim the subject invention. Support for these amendments will be found in the original drawings, see, e.g. Figs 1, 3 and 4. Claims 1-18 remain in this application.

In the last Office Action, the drawings were objected to under 37 CFR 1.83(a) as allegedly failing to adequately show the profile 1(k) as described in the specification. Under cover of a separate letter to the official draftsman, Applicant is submitting a replacement drawing sheet 5/6 more clearly depicting the profile. Entry and approval of the replacement drawing sheet and withdrawal of this objection are respectfully requested.

Claims 1-3 and 5-8 stand rejected under 35 U.S.C. § 103(a) as allegedly obvious over Desjoyaux (French patent no. 2,765,909) in view of Benvenuto, et al. (U.S. Patent No. 5,687,526), and Graham (U.S. Patent No. 3,039,575). Claims 4 and 9-16 stand rejected on the same grounds, further in view of Taylor, et al. (U.S. Patent No. 4,514,104).

These rejections, to the extent that they may be deemed applicable to the claims, as now presented, are respectfully, but most strenuously traversed.

The present invention is directed to panels for producing swimming pools and, more particularly, to an improved arrangement for interconnecting adjacent panels. The interconnecting arrangement includes anchoring tabs formed in a thickness of, and extending coplanar with, one planar vertical flange of a panel; each of the tabs having anchoring roughnesses on an outwardly oriented face. The tabs are engaged in spaced apart wells or sleeves formed on an other vertical flange of an adjacent panel. A part of an outwardly oriented bearing face of this other flange from which said sleeves or wells are formed, has complementary roughnesses so that when the tabs have been engaged in the corresponding wells or sleeves by a bearing force exerted in a plane parallel to the vertical flanges, a wedging effect is produced for imbricating the roughnesses. At least one of the wells or sleeves comprises a rear wall including said part, a pair of longitudinally spaced apart side wall members, and a front wall member substantially u-shaped in a plane generally parallel to said rear wall. A profiled shape provided

along an entire height of the vertical flanges protrudes beyond one of the vertical flanges at a level of a flat surface of the structure to ensure sealing once the tabs have been engaged in the sleeves or wells.

No such composite structure or combination of claimed features is taught, disclosed or suggested by the applied references.

Fr2765909 represents Applicant's own earlier work, and, as the Examiner recognizes, clearly employs a totally different panel connection approach. To supplement the teachings of this primary reference, the Examiner refers to the teachings of Benvenuto, et al. relating to a TRACKLESS DROP CEILING SYSTEM and Graham relating to a COMPOSITE METAL GRATING.

Preliminarily, Applicant notes that the secondary references are directed to totally different products, issues and concerns from each other and from the primary reference. It is highly unlikely that one seeking to improve panels for producing swimming pools, would refer to a TRACKLESS DROP CEILING SYSTEM or to a COMPOSITE METAL GRATING for floors, cat-walks, decks, runways and the like. The issues confronting swimming pool construction are far different from those of drop ceilings or composite gratings.

Figure 13 of Benvenuto, et al. depicts an interlocking support and alignment structure for adjacent ceiling tiles in which a vertical tab 103 on a first tile projects through a horizontal slotted tab 101 on an adjacent tile. For a suspended ceiling, this simple interconnection may be adequate but it is insufficient for securely fastening side by side vertical panels of a swimming pool.

Graham teaches a structure for connecting two adjacent elongated metal gratings as shown in figures 3 and 4 of this patent. In this connection, flanges 22, 22, 24 along one side of a first grate section form an elongated groove 28 extending the length of the grate section 10 (column 2, lines 40-44 of the reference, emphasis added) and opening upwardly to receive a downwardly depending flange 18 of an adjoining grate section.

Further, this reference explicitly teaches that the “inner face of the flange 24 is formed with a plurality of contiguous superimposed inwardly projecting, longitudinally extending ribs 30, which in cross section present a serrated or saw tooth profile”; and that “the portion of the flange 18 which is insertable into the groove 28 of the bearer bar 26 of an adjoining grate section, is provided on its inner face with a plurality of contiguous superimposed longitudinally extending grooves 36 which in cross sectional through the flange 18 present a serrated profile.” (Column 2, lines 45-56 of the reference, emphasis added). In contrast, in the present invention, the anchoring roughnesses of the tabs and the complementary roughnesses of the sleeves are both located on outwardly oriented faces. In fact, the prescribed locations of the serrations in Graham could not be implemented in the claimed panels since the front wall of Applicant’s sleeves or wells is u-shaped and, therefore, would not provide the desired imbrication.

Graham also teaches that the minimum thickness of downwardly depending flange 18 is slightly greater than the horizontal opening of flange 20 “so that the flange 18 of one grate section 10 is not freely insertable into the groove 28 of the bearer bar 26 of an adjoining grate section 10.” (Column 2, lines 62 – column 3, line 2 of the reference, emphasis added.) Thus, increased resistance is encountered and increased pressure is required for full insertion (see column 3, lines 3-22). This feature is contrary to Applicant’s goal of facilitating easy assembly of swimming pool panels. Furthermore, not only are the serrations of Graham oppositely oriented but also his groove 28 is unbounded in the longitudinal direction. Certainly, there is no teaching in any of the applied references of the particular construction of Applicant’s wells or sleeves, as now specified in each of the independent claims.

The Examiner also referred to the Taylor reference as showing a free end of anchoring tabs being chamfered to allow for the easy connection and locking of panels together. However, the “tabs” or depending legs (24, 26, 36 and 38) of this reference are used to connect a top horizontal tile 10 to a vertical side support 12 or multiple side supports end-to-end in a vertical plane. Such tabs are not used to connect adjacent vertical supports; rather the structure shown in cross-section in Figure 3 of this reference is used for that purpose.

Applicant respectfully submits that there is no suggestion in these references themselves to why or how they should be combined. Furthermore, the combined teachings of the references

would still not produce the swimming pool panels as now defined by amended independent claims 1 and 9.

None of the applied references recognize the limitations of prior swimming pool panels addressed by the present invention. None of the applied secondary references even relate to swimming pool panels. Rather, these references are directed to a suspended ceiling, a composite floor grating and to a self-supporting element for mosaic display panel. Accordingly, there would be no reason for one skilled in the art to combine these references with each other or the basic Desjoyaux reference. Instead, the selection and combination of these features is the result of impermissible hindsight reasoning based on the features recited in the claims of the present application, and such a combination is improper. Applicant further submits that the multiplicity of references employed in the rejection and their distinct fields of application belie the obviousness of this rejection.

Since the applied references themselves fail to recognize the problem addressed by the present invention, fail to teach the claimed solution, fail to achieve the benefits realized thereby, and fail to provide any motivation to combine their teachings in a manner which would produce the claimed invention, the Examiner is respectfully requested to reconsider and withdraw this grounds for rejection.

The dependant claims are allowable for the same reasons as the independent claims from which they all ultimately depend, as well as for their additional limitations.

Enclosed with this Amendment, Applicant is submitting a CD containing videos which contrast the connection method of the primary reference (labeled Desco 1994.wmv) and that of the present invention (labeled New Desco2005.wmv). These videos are believed to clearly demonstrate the significant benefits afforded by the present invention.

In conclusion, Applicant submits that the combination of references is, at best, tenuous and would still not produce the invention as now claimed. Applicant has devised a unique coupling and sealing arrangement for swimming pool panels which provides a significant advance in this art, worthy of patent protection.

If it would advance the prosecution of this application, the Examiner is respectfully requested to contact Applicant's attorney at the below listed telephone number.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jeff Rothenberg", written over a horizontal line.

Jeff Rothenberg  
Reg. No. 26,429  
Attorney for Applicant

Dated: 12/6/06

Heslin Rothenberg Farley & Mesiti P.C.  
5 Columbia Circle  
Albany, New York 12203  
Tel: 518-452-5600  
Fax: 518-452-5579  
E-mail: [jr@hrfmlaw.com](mailto:jr@hrfmlaw.com)